

6. Power Seat System

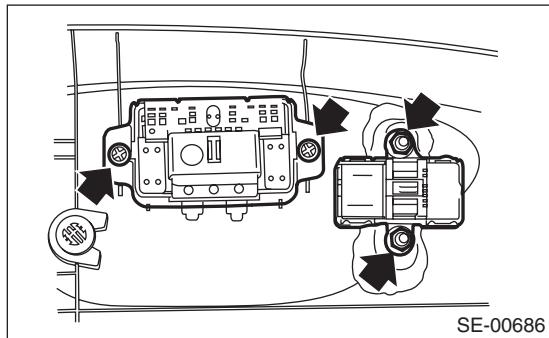
A: REMOVAL

CAUTION:

When it is necessary to remove the front seat, disconnect the ground cable from battery and wait for 20 seconds before disconnecting the side airbag module harness connector.

1. POWER SEAT SWITCH

- 1) Detach the connectors and remove the seat side cover outside. <Ref. to SE-8, DISASSEMBLY, Front Seat.>
- 2) Remove the screws to remove the power seat switch assembly.

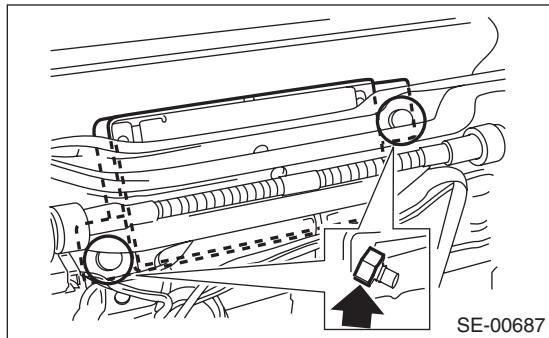


NOTE:

Perform the same procedure when removing the memory switch of memory-equipped seat.

2. MEMORY MODULE (MEMORY-EQUIPPED SEAT)

- 1) Lift the seat cushion by operating the switch.
- 2) Remove the front seat from the vehicle.
- 3) Remove the nut and then remove the memory module.



B: INSTALLATION

Install in the reverse order of removal.

NOTE:

- For the memory-equipped seat, always perform the initialize operation after the installation. <Ref. to SE-36, ADJUSTMENT, Power Seat System.>
- Check the following items after replacing the memory-equipped seat or the memory module.
 1. Memory feature is restored after turning the ignition switch to ON and shifting to P range.
 2. Memory feature is not restored after turning the ignition switch to ON and shifting to other than P range.

C: INSPECTION

1. WIRING DIAGRAM

- Driver's side (without memory) <Ref. to WI-87, DRIVER'S SEAT (WITH MEMORY), WIRING DIAGRAM, Power Seat System.>
- Driver's side (memory-equipped) <Ref. to WI-86, DRIVER'S SEAT (WITHOUT MEMORY), WIRING DIAGRAM, Power Seat System.>
- Passenger's side <Ref. to WI-88, PASSENGER'S SEAT, WIRING DIAGRAM, Power Seat System.>

2. TROUBLE SYMPTOM

- Driver's seat (without memory)

Symptom	Criteria
All function fails to operate. <Ref. to SE-24, ALL FUNCTION FAILS TO OPERATE (DRIVER'S SEAT, WITHOUT MEMORY), INSPECTION, Power Seat System.>	<ul style="list-style-type: none"> • Power seat switch • Power seat harness • Body harness
A part of function does not operate. <Ref. to SE-24, SOME OF THE MOTORS DO NOT OPERATE (DRIVER'S SEAT, WITHOUT MEMORY), INSPECTION, Power Seat System.>	<ul style="list-style-type: none"> • Power seat switch • Power seat harness • Relevant motor

Power Seat System

SEATS

- Driver's seat (memory-equipped)

Symptom	Criteria
Does not operate by manual operation. <Ref. to SE-27, DOES NOT OPERATE IN MANUAL OPERATION (DRIVER'S SEAT, MEMORY-EQUIPPED), INSPECTION, Power Seat System.>	<ul style="list-style-type: none"> • Power seat switch • Power seat harness • Body harness • Relevant motor and encoder
A part of function does not operate. <Ref. to SE-28, SOME OF THE MOTORS DO NOT OPERATE (DRIVER'S SEAT, WITH MEMORY), INSPECTION, Power Seat System.>	<ul style="list-style-type: none"> • Power seat switch • Power seat harness • Relevant motor and encoder • Memory module
Fails to store the location to the memory <Ref. to SE-32, FAILS TO STORE THE LOCATION TO THE MEMORY (DRIVER'S SEAT, WITH MEMORY), INSPECTION, Power Seat System.>	<ul style="list-style-type: none"> • Memory switch • Power seat harness • Memory module
Restoring operation is impossible <Ref. to SE-32, FAILS TO PERFORM THE REPLAY OPERATION (DRIVER'S SEAT, WITH MEMORY), INSPECTION, Power Seat System.>	<ul style="list-style-type: none"> • Memory switch • Memory module • Motor and encoder • Battery voltage (operation voltage)
Initial setting is impossible <Ref. to SE-34, INITIALIZATION IS IMPOSSIBLE, INSPECTION, Power Seat System.>	<ul style="list-style-type: none"> • Power seat harness • Memory module

- Passenger's seat

Symptom	Criteria
All function fails to operate. <Ref. to SE-34, ALL FUNCTION FAILS TO OPERATE (PASSENGER'S SEAT), INSPECTION, Power Seat System.>	<ul style="list-style-type: none"> • Power seat switch • Power seat harness • Body harness
A part of function does not operate. <Ref. to SE-35, SOME MOTORS DO NOT OPERATE (PASSENGER'S SEAT), INSPECTION, Power Seat System.>	<ul style="list-style-type: none"> • Power seat switch • Power seat harness • Relevant motor

3. CHECK POWER SEAT SWITCH

Move each switch and measure the resistance between connector terminals.

- Driver's seat (without memory)

6	5	4		3	2	1
14	13	12	11	10	9	8

SE-00682

Switch position	Terminal No.	Standard
Slide forward	7 and 14 8 and 13	Less than 10 Ω
Slide backward	7 and 13 8 and 14	Less than 10 Ω
Tilt up	7 and 2 8 and 1	Less than 10 Ω
Tilt down	7 and 1 8 and 2	Less than 10 Ω
Lifter up	7 and 5 8 and 6	Less than 10 Ω
Lifter down	7 and 6 8 and 5	Less than 10 Ω
Reclining forward	7 and 3 8 and 4	Less than 10 Ω
Reclining backward	7 and 4 8 and 3	Less than 10 Ω

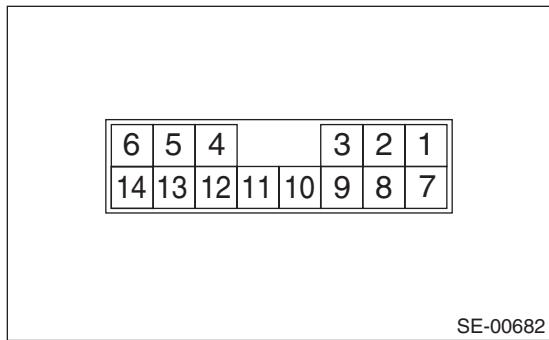
- Driver's seat (memory-equipped)

6	5	4		3	2	1
14	13	12	11	10	9	8

SE-00682

Switch position	Terminal No.	Standard
Slide forward	13 and 7	Less than 10 Ω
Slide backward	14 and 7	Less than 10 Ω
Tilt up	5 and 7	Less than 10 Ω
Tilt down	6 and 7	Less than 10 Ω
Lifter up	2 and 7	Less than 10 Ω
Lifter down	1 and 7	Less than 10 Ω
Reclining forward	4 and 7	Less than 10 Ω
Reclining backward	3 and 7	Less than 10 Ω

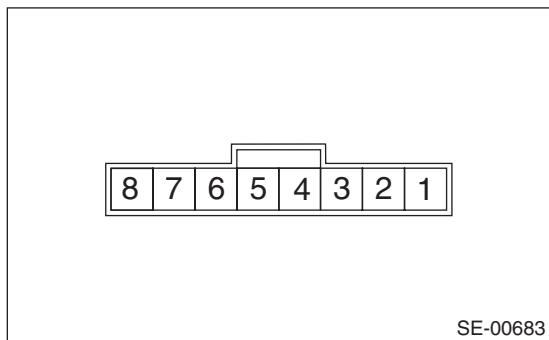
- Passenger's seat



Switch position	Terminal No.	Standard
Slide forward	7 and 13 8 and 14	Less than 10 Ω
Slide backward	7 and 14 8 and 13	Less than 10 Ω
Reclining forward	7 and 4 8 and 3	Less than 10 Ω
Reclining backward	7 and 3 8 and 4	Less than 10 Ω

4. CHECK MEMORY SWITCH (MEMORY-EQUIPPED)

Move each switch and measure the resistance between connector terminals.



Switch position	Terminal No.	Standard
Memory 1	3 and 1	Less than 10 Ω
Memory 2	2 and 1	Less than 10 Ω
Set	8 and 1	Less than 10 Ω

Power Seat System

SEATS

5. ALL FUNCTION FAILS TO OPERATE (DRIVER'S SEAT, WITHOUT MEMORY)

Step	Check	Yes	No
1 CHECK SEAT FUNCTIONS. Operate each power seat switch and check that each power seat function operates normally.	Does all function fails to operate?	Go to step 2.	Check the motor which does not operate. <Ref. to SE-24, SOME OF THE MOTORS DO NOT OPERATE (DRIVER'S SEAT, WITHOUT MEMORY), INSPECTION, Power Seat System.>
2 CHECK FUSE. Check the power seat fuse inside the fuse box.	Is the fuse blown out?	Replace the appropriate fuse.	Go to step 3.
3 CHECK POWER SUPPLY CIRCUIT. 1) Disconnect the connector of power seat switch assembly. 2) Measure the voltage between harness connector and chassis ground. <i>Connector & terminal (R190) No. 7 — Chassis ground:</i>	Is the voltage 10 V or more?	Go to step 4.	Check body harness.
4 CHECK POWER SUPPLY CIRCUIT. Measure the resistance between power seat switch harness connector and chassis ground. <i>Connector & terminal (R190) No. 8 — Chassis ground:</i>	Is the resistance less than 10 Ω ?	Replace the power seat switch assembly.	Check body harness.

6. SOME OF THE MOTORS DO NOT OPERATE (DRIVER'S SEAT, WITHOUT MEMORY)

- Slide operation failure

Step	Check	Yes	No
1 CHECK SWITCH. 1) Disconnect the connector of power seat switch assembly. 2) Measure the resistance between connector terminals when moving the switch to slide forward and slide backward. <Ref. to SE-22, CHECK POWER SEAT SWITCH, INSPECTION, Power Seat System.>	Is there any problem on the inspection result?	Go to step 2.	Replace the power seat switch assembly.
2 CHECK HARNESS. 1) Disconnect the power seat switch connector and slide motor connector. 2) Measure the resistance between power seat switch connector and slide motor connector. <i>Connector & terminal (R192) No. 1 — (R190) No. 14: (R192) No. 2 — (R190) No. 13:</i>	Is the resistance less than 10 Ω ?	Go to step 3.	Check power seat harness.
3 CHECK SLIDE MOTOR. 1) Connect the power seat switch connector and slide motor connector. 2) Apply 12 V to the slide motor and check the motor rotation. <i>Connector & terminal (R190) No. 14 (+) — (R190) No. 13 (-): (R190) No. 13 (+) — (R190) No. 14 (-):</i>	Does the motor rotate normally?	Check for temporary poor contact or mechanical trouble in slide rail.	Slide motor problem. Replace the slide rail assembly.

Power Seat System

SEATS

- Malfunction of tilt operation

Step	Check	Yes	No
1 CHECK SWITCH. 1) Disconnect the connector of power seat switch assembly. 2) Measure the resistance between connector terminals when moving the switch to tilt up and tilt down. <Ref. to SE-22, CHECK POWER SEAT SWITCH, INSPECTION, Power Seat System.>	Is there any problem on the inspection result?	Go to step 2.	Replace the power seat switch assembly.
2 CHECK HARNESS. 1) Disconnect the power seat switch connector and tilt motor connector. 2) Measure the resistance between power seat switch connector and tilt motor connector. Connector & terminal (R193) No. 2 — (R190) No. 2: (R193) No. 3 — (R190) No. 1:	Is the resistance less than 10 Ω?	Go to step 3.	Check power seat harness.
3 CHECK TILT MOTOR. 1) Connect the power seat switch connector and tilt motor connector. 2) Apply 12 V to the tilt motor and check the motor rotation. Connector & terminal (R190) No. 2 (+) — (R190) No. 1 (-): (R190) No. 1 (+) — (R190) No. 2 (-):	Does the motor rotate normally?	Check for temporary poor contact or mechanical trouble in tilt mechanism.	Tilt motor problem. Replace the slide rail assembly.

- Malfunction of lifter operation

Step	Check	Yes	No
1 CHECK SWITCH. 1) Disconnect the connector of power seat switch assembly. 2) Measure the resistance between connector terminals when moving the switch to lifter up and lifter down. <Ref. to SE-22, CHECK POWER SEAT SWITCH, INSPECTION, Power Seat System.>	Is there any problem on the inspection result?	Go to step 2.	Replace the power seat switch assembly.
2 CHECK HARNESS. 1) Disconnect the power seat switch connector and lifter motor connector. 2) Measure the resistance between power seat switch connector and lifter motor connector. Connector & terminal (R194) No. 4 — (R190) No. 5: (R194) No. 3 — (R190) No. 6:	Is the resistance less than 10 Ω?	Go to step 3.	Check power seat harness.
3 CHECK LIFTER MOTOR. 1) Connect the power seat switch connector and lifter motor connector. 2) Apply 12 V to the lifter motor and check the motor rotation. Connector & terminal (R190) No. 5 (+) — (R190) No. 6 (-): (R190) No. 6 (+) — (R190) No. 5 (-):	Does the motor rotate normally?	Check for temporary poor contact or mechanical trouble in lifter mechanism.	Lifter motor problem. Replace the slide rail assembly.

Power Seat System

SEATS

- Malfunction of reclining operation

Step	Check	Yes	No
1 CHECK SWITCH. 1) Disconnect the connector of power seat switch assembly. 2) Measure the resistance between connector terminals when moving the switch to reclining forward and reclining backward. <Ref. to SE-22, CHECK POWER SEAT SWITCH, INSPECTION, Power Seat System.>	Is there any problem on the inspection result?	Go to step 2 .	Replace the power seat switch assembly.
2 CHECK HARNESS. 1) Disconnect the power seat switch connector and reclining motor connector. 2) Measure the resistance between power seat switch connector and reclining motor connector. <i>Connector & terminal</i> <i>(R191) No. 2 — (R190) No. 3:</i> <i>(R191) No. 1 — (R190) No. 4:</i>	Is the resistance less than 10 Ω ?	Go to step 3 .	Check power seat harness.
3 CHECK RECLINING MOTOR. 1) Connect the power seat switch connector and reclining motor connector. 2) Apply 12 V to the reclining motor and check the motor rotation. <i>Connector & terminal</i> <i>(R190) No. 3 (+) — (R190) No. 4 (-):</i> <i>(R190) No. 4 (+) — (R190) No. 3 (-):</i>	Does the motor rotate normally?	Check for temporary poor contact or mechanical trouble in reclining hinge.	Reclining motor problem. Replace the backrest hinge and motor assembly.

7. DOES NOT OPERATE IN MANUAL OPERATION (DRIVER'S SEAT, MEMORY-EQUIPPED)

Step	Check	Yes	No
1 CHECK SEAT FUNCTIONS. Operate each power seat switch and check that each power seat function operates normally.	Does all function fails to operate?	Go to step 2.	Check the motor which does not operate. <Ref. to SE-28, SOME OF THE MOTORS DO NOT OPERATE (DRIVER'S SEAT, WITH MEMORY), INSPECTION, Power Seat System. >
2 CHECK FUSE. Check the power seat fuse inside the fuse box.	Is the fuse blown out?	Replace the appropriate fuse.	Go to step 3.
3 CHECK POWER SUPPLY CIRCUIT. 1) Disconnect the memory module connector. 2) Measure the voltage between harness connector and chassis ground. <i>Connector & terminal</i> <i>(R195) No. 10 (+) — Chassis ground (-):</i> <i>(R196) No. 8 (+) — Chassis ground (-):</i> <i>(R196) No. 3 (+) — Chassis ground (-):</i>	Is the voltage 10 V or more?	Go to step 4.	Check body harness.
4 CHECK POWER SUPPLY CIRCUIT. Measure the resistance between memory module harness connector and chassis ground. <i>Connector & terminal</i> <i>(R196) No. 14 — Chassis ground:</i> <i>(R196) No. 12 — Chassis ground:</i>	Is the resistance less than 10 Ω ?	Go to step 5.	Check body harness.
5 CHECK SWITCH. 1) Disconnect the connector of power seat switch assembly. 2) Measure the resistance between connector terminals when moving the switch to reclining forward and reclining backward. <Ref. to SE-22, CHECK POWER SEAT SWITCH, INSPECTION, Power Seat System. >	Is there any problem on the inspection result?	Replace the memory module.	Replace the power seat switch assembly.

Power Seat System

SEATS

8. SOME OF THE MOTORS DO NOT OPERATE (DRIVER'S SEAT, WITH MEMORY)

- Slide operation failure

Step	Check	Yes	No
1 CHECK OPERATION. Check the slide motor rotation while moving the switch to slide forward and slide backward.	Does the motor operate at least 1 second when the switch is operated?	Go to step 2.	Encoder deflection. Replace the slide rail assembly.
2 CHECK SWITCH. 1) Disconnect the harness connector of power seat switch assembly. 2) Measure the resistance between connector terminals when moving the switch to slide forward and slide backward. <Ref. to SE-22, CHECK POWER SEAT SWITCH, INSPECTION, Power Seat System.>	Is there any problem on the inspection result?	Go to step 3.	Replace the power seat switch assembly.
3 CHECK HARNESS. 1) Disconnect the power seat switch connector and slide motor connector. 2) Measure the resistance between the memory module connector and power seat switch connector. <i>Connector & terminal</i> (R195) No. 7 — (R190) No. 13: (R195) No. 6 — (R190) No. 14:	Is the resistance less than 10 Ω?	Go to step 4.	Check power seat harness.
4 CHECK HARNESS. 1) Disconnect the slide motor connector. 2) Measure the resistance between the memory module connector and slide motor connector. <i>Connector & terminal</i> (R196) No. 16 — (R206) No. 1: (R196) No. 15 — (R206) No. 2:	Is the resistance less than 10 Ω?	Go to step 5.	Check power seat harness.
5 CHECK SLIDE MOTOR. Apply battery voltage to the memory module connector and check the motor rotation. <i>Connector & terminal</i> (R196) No. 16 (+) — (R196) No. 15 (-): (R196) No. 15 (+) — (R196) No. 16 (-):	Does the motor rotate normally?	Replace the memory module.	Slide motor problem. Replace the slide rail assembly.

Power Seat System

SEATS

- Malfunction of tilt operation

Step	Check	Yes	No
1 CHECK OPERATION. Check the tilt motor rotation while moving the switch to tilt up and tilt down.	Does the motor rotate for one second or more when operating the switch?	Go to step 2.	Encoder deflection. Replace the slide rail assembly.
2 CHECK SWITCH. 1) Disconnect the harness connector of power seat switch assembly. 2) Measure the resistance between connector terminals when moving the switch to tilt up and tilt down. <Ref. to SE-22, CHECK POWER SEAT SWITCH, INSPECTION, Power Seat System.>	Is there any problem on the inspection result?	Go to step 3.	Replace the power seat switch assembly.
3 CHECK HARNESS. 1) Disconnect the power seat switch connector and tilt motor connector. 2) Measure the resistance between the memory module connector and power seat switch connector. <i>Connector & terminal</i> (R195) No. 3 — (R190) No. 5: (R195) No. 2 — (R190) No. 6:	Is the resistance less than 10 Ω ?	Go to step 4.	Check power seat harness.
4 CHECK HARNESS. 1) Disconnect the tilt motor connector. 2) Measure the resistance between the memory module connector and tilt motor connector. <i>Connector & terminal</i> (R196) No. 4 — (R193) No. 3: (R196) No. 5 — (R193) No. 2:	Is the resistance less than 10 Ω ?	Go to step 5.	Check power seat harness.
5 CHECK TILT MOTOR. Apply battery voltage to the memory module connector and check the motor rotation. <i>Connector & terminal</i> (R196) No. 4 (+) — (R196) No. 5 (-): (R196) No. 5 (+) — (R196) No. 4 (-):	Does the motor rotate normally?	Replace the memory module.	Tilt motor problem. Replace the slide rail assembly.

Power Seat System

SEATS

- Malfunction of lifter operation

Step	Check	Yes	No
1 CHECK OPERATION. Check the lifter motor rotation while turning the switch to lifter up and lifter down.	Does the motor rotate for one second or more when operating the switch?	Go to step 2.	Encoder deflection. Replace the slide rail assembly.
2 CHECK SWITCH. 1) Disconnect the harness connector of power seat switch assembly. 2) Measure the resistance between connector terminals when moving the switch to lifter up and lifter down. <Ref. to SE-22, CHECK POWER SEAT SWITCH, INSPECTION, Power Seat System.>	Is there any problem on the inspection result?	Go to step 3.	Replace the power seat switch assembly.
3 CHECK HARNESS. 1) Disconnect the power seat switch connector and lifter motor connector. 2) Measure the resistance between the memory module connector and power seat switch connector. <i>Connector & terminal</i> (R195) No. 5 — (R190) No. 2: (R195) No. 4 — (R190) No. 1:	Is the resistance less than 10 Ω ?	Go to step 4.	Check power seat harness.
4 CHECK HARNESS. 1) Disconnect the lifter motor connector. 2) Measure the resistance between the memory module connector and lifter motor connector. <i>Connector & terminal</i> (R196) No. 1 — (R194) No. 4: (R196) No. 2 — (R194) No. 3:	Is the resistance less than 10 Ω ?	Go to step 5.	Check power seat harness.
5 CHECK LIFTER MOTOR. Apply battery voltage to the memory module connector and check the motor rotation. <i>Connector & terminal</i> (R196) No. 1 (+) — (R196) No. 2 (-): (R196) No. 2 (+) — (R196) No. 1 (-):	Does the motor rotate normally?	Replace the memory module.	Lifter motor problem. Replace the slide rail assembly.

Power Seat System

SEATS

- Malfunction of reclining operation

Step	Check	Yes	No
1 CHECK OPERATION. Check the reclining motor rotation while moving the switch to reclining forward and reclining backward.	Does the motor rotate for one second or more when operating the switch?	Go to step 2.	Encoder deflection. Replace the backrest hinge and motor assembly.
2 CHECK SWITCH. 1) Disconnect the harness connector of power seat switch assembly. 2) Measure the resistance between connector terminals when moving the switch to reclining forward and reclining backward. <Ref. to SE-22, CHECK POWER SEAT SWITCH, INSPECTION, Power Seat System.>	Is there any problem on the inspection result?	Go to step 3.	Replace the power seat switch assembly.
3 CHECK HARNESS. 1) Disconnect the power seat switch connector and reclining motor connector. 2) Measure the resistance between the memory module connector and power seat switch connector. <i>Connector & terminal</i> (R195) No. 9 — (R190) No. 4: (R195) No. 8 — (R190) No. 3:	Is the resistance less than 10 Ω?	Go to step 4.	Check power seat harness.
4 CHECK HARNESS. 1) Disconnect the slide motor connector. 2) Measure the resistance between the memory module connector and reclining motor connector. <i>Connector & terminal</i> (R196) No. 6 — (R191) No. 1: (R196) No. 7 — (R191) No. 2:	Is the resistance less than 10 Ω?	Go to step 5.	Check power seat harness.
5 CHECK RECLINING MOTOR. Apply battery voltage to the memory module connector and check the motor rotation. <i>Connector & terminal</i> (R196) No. 6 (+) — (R196) No. 7 (-): (R196) No. 7 (+) — (R196) No. 6 (-):	Does the motor rotate normally?	Replace the memory module.	Reclining motor problem. Replace the backrest hinge and motor assembly.

Power Seat System

SEATS

9. FAILS TO STORE THE LOCATION TO THE MEMORY (DRIVER'S SEAT, WITH MEMORY)

Step	Check	Yes	No
1 CHECK SWITCH. 1) Disconnect the harness connector of memory switch assembly. 2) Check memory switch. <Ref. to SE-23, CHECK MEMORY SWITCH (MEMORY-EQUIPPED), INSPECTION, Power Seat System.>	Is there any problem on the inspection result?	Go to step 2.	Replace the memory switch assembly.
2 CHECK HARNESS. Measure the resistance between the memory switch connector and memory module connector. <i>Connector & terminal</i> (R195) No. 13 — (R198) No. 3: (R195) No. 14 — (R198) No. 2: (R195) No. 15 — (R198) No. 8:	Is the resistance less than 10 Ω?	Go to step 3.	Check power seat harness.
3 SYSTEM INITIALIZATION. Initialize memory seat system. <Ref. to SE-36, ADJUSTMENT, Power Seat System.>	Is the initialization completed successfully?	Replace the memory module.	<Ref. to SE-34, INITIALIZATION IS IMPOSSIBLE, INSPECTION, Power Seat System.>

10. FAILS TO PERFORM THE REPLAY OPERATION (DRIVER'S SEAT, WITH MEMORY)

Step	Check	Yes	No
1 CHECK MEMORY FUNCTIONS. Perform the memory operation of the seat position, and check the memory replay operation.	Does the seat position memory replay correctly?	Memory function is normal. Memory seems to be cleared since voltage was less from the operation-ensured voltage temporary at the time of memory restoring and manual operation. It operates normally by registering a memory.	Go to step 2.
2 CHECK MEMORY FUNCTIONS. At the step 1 memory operation, check the beep sound (once).	Check the beep sound?	Go to step 3.	<Ref. to SE-32, FAILS TO STORE THE LOCATION TO THE MEMORY (DRIVER'S SEAT, WITH MEMORY), INSPECTION, Power Seat System.>
3 CHECK SWITCH. 1) Disconnect the harness connector of memory switch assembly. 2) Check memory switch. <Ref. to SE-23, CHECK MEMORY SWITCH (MEMORY-EQUIPPED), INSPECTION, Power Seat System.>	Is there any problem on the inspection result?	Go to step 4.	Replace the memory switch assembly.

Power Seat System

SEATS

Step	Check	Yes	No
4 CHECK HARNESS. Measure the resistance between the memory switch connector and memory module connector. Connector & terminal <i>(R195) No. 13 — (R198) No. 3:</i> <i>(R195) No. 14 — (R198) No. 2:</i> <i>(R195) No. 15 — (R198) No. 8:</i>	Is the resistance less than 10 Ω ?	Go to step 5.	Check power seat harness.
5 CHECK IGNITION CIRCUIT. Measure the voltage between harness connector and chassis ground while turning the ignition switch to ON. Connector & terminal <i>(R195) No. 11 (+) — Chassis ground (-):</i>	Is the voltage 10 V or more?	Go to step 6.	Check body harness.
6 CHECK TRANSMISSION CIRCUITS. Measure the resistance between harness connector and chassis ground while shifting the select lever to P position. Connector & terminal <i>(R195) No. 12 — Chassis ground:</i>	Is the resistance less than 10 Ω ?	Go to step 7.	Check body harness.
7 CHECK VEHICLE SPEED SIGNAL. 1) Lift up the vehicle and support it with rigid racks. 2) Drive the vehicle faster than 10 km/h (6 MPH). WARNING: Be careful not to be dragged in by the rotating wheel. 3) Measure the voltage between harness connector and chassis ground. Connector & terminal <i>(R195) No. 9 (+) — Chassis ground (-):</i>	Is the voltage less than 1 V \leftrightarrow 5 V or more?	Go to step 9.	Go to step 8.
8 CHECK HARNESS BETWEEN VDCCM AND MEMORY UNIT. 1) Turn the ignition switch to OFF. 2) Disconnect the connector from VDCCM and memory unit. 3) Measure the resistance between VDCCM harness connector and combination meter harness connector. Connector & terminal <i>(B310) No. 10 — (R195) No. 9:</i>	Is the resistance less than 10 Ω ?	Check the VDCCM. <Ref. to VDC(diag)-2, Basic Diagnostic Procedure.>	Check body harness.
9 CHECK OPERATION. Operate all power seat switches to check operation of each motor.	Does each motor rotate for one second or more when operating each switch?	Replace the memory module.	Encoder deflection. Replace the motor(s) found to be faulty.

Power Seat System

SEATS

11. INITIALIZATION IS IMPOSSIBLE

Step	Check	Yes	No
1 CHECK OPERATION. Operate all power seat switches to check operation of each motor.	Does each motor rotate for one second or more when operating each switch?	Go to step 2 .	Encoder deflection. Replace the motor(s) found to be faulty.
2 CHECK SWITCH. 1) Disconnect the harness connector of power seat switch assembly. 2) Measure resistance between all terminals of power seat switch assembly. <Ref. to SE-22, CHECK POWER SEAT SWITCH, INSPECTION, Power Seat System.>	Is there any problem on the inspection result?	Replace the memory module.	Replace the power seat switch assembly.

12. ALL FUNCTION FAILS TO OPERATE (PASSENGER'S SEAT)

Step	Check	Yes	No
1 CHECK SEAT FUNCTIONS. Operate each power seat switch and check that each power seat function operates normally.	Does all function fails to operate?	Go to step 2 .	Check the motor which does not operate. <Ref. to SE-35, SOME MOTORS DO NOT OPERATE (PASSENGER'S SEAT), INSPECTION, Power Seat System.>
2 CHECK FUSE. Check the power seat fuse inside the fuse box.	Is the fuse blown out?	Replace the appropriate fuse.	Go to step 3 .
3 CHECK POWER SUPPLY CIRCUIT. 1) Disconnect the connector of power seat switch assembly. 2) Measure the voltage between harness connector and chassis ground. <i>Connector & terminal (R200) No. 7 (+) — Chassis ground (-):</i>	Is the voltage 10 V or more?	Go to step 4 .	Check body harness.
4 CHECK POWER SUPPLY CIRCUIT. Measure the resistance between power seat switch harness connector and chassis ground. <i>Connector & terminal (R200) No. 8 — Chassis ground:</i>	Is the resistance less than 10 Ω ?	Replace the power seat switch assembly.	Check body harness.

13. SOME MOTORS DO NOT OPERATE (PASSENGER'S SEAT)

- Slide operation failure

Step	Check	Yes	No
1 CHECK SWITCH. 1) Disconnect the connector of power seat switch assembly. 2) Measure the resistance between connector terminals when moving the switch to slide forward and slide backward. <Ref. to SE-22, CHECK POWER SEAT SWITCH, INSPECTION, Power Seat System.>	Is there any problem on the inspection result?	Go to step 2.	Replace the power seat switch assembly.
2 CHECK HARNESS. 1) Disconnect the power seat switch connector and slide motor connector. 2) Measure the resistance between power seat switch connector and slide motor connector. <i>Connector & terminal</i> (R202) No. 1 — (R200) No. 13: (R202) No. 2 — (R200) No. 14:	Is the resistance less than 10 Ω ?	Go to step 3.	Check power seat harness.
3 CHECK SLIDE MOTOR. 1) Connect the power seat switch connector and slide motor connector. 2) Apply 12 V to the slide motor and check the motor rotation. <i>Connector & terminal</i> (R200) No. 14 (+) — (R200) No. 13 (-): (R200) No. 13 (+) — (R200) No. 14 (-):	Does the motor rotate normally?	Check for temporary poor contact or mechanical trouble in slide rail.	Slide motor problem. Replace the slide rail assembly.

- Malfunction of reclining operation

Step	Check	Yes	No
1 CHECK SWITCH. 1) Disconnect the connector of power seat switch assembly. 2) Measure the resistance between connector terminals when moving the switch to reclining forward and reclining backward. <Ref. to SE-22, CHECK POWER SEAT SWITCH, INSPECTION, Power Seat System.>	Is there any problem on the inspection result?	Go to step 2.	Replace the power seat switch assembly.
2 CHECK HARNESS. 1) Disconnect the power seat switch connector and reclining motor connector. 2) Measure the resistance between power seat switch connector and reclining motor connector. <i>Connector & terminal</i> (R201) No. 2 — (R200) No. 4: (R201) No. 1 — (R200) No. 3:	Is the resistance less than 10 Ω ?	Go to step 3.	Check power seat harness.
3 CHECK RECLINING MOTOR. 1) Connect the power seat switch connector and reclining motor connector. 2) Apply 12 V to the reclining motor and check the motor rotation. <i>Connector & terminal</i> (R200) No. 3 (+) — (R200) No. 4 (-): (R200) No. 4 (+) — (R200) No. 3 (-):	Does the motor rotate normally?	Check for temporary poor contact or mechanical trouble in reclining hinge.	Reclining motor problem. Replace the backrest hinge and motor assembly.

D: ADJUSTMENT

NOTE:

The calibration procedures apply only to the memory-equipped seat on the driver's side.

1. INITIALIZING CONDITIONS

Perform the initializing operation to the memory module when the following conditions are met.

- When the seat was removed from vehicle.
- When the memory module was replaced.
- When the slide rail assembly or backrest hinge and motor assembly was removed or replaced.
- When the pulse generated while the seat is moving differs from the actual distance. (When memory replay operation is not normally carried out)

2. INITIALIZATION PROCEDURE

NOTE:

- Initialize the records inside the module by performing all the following steps regardless the item order.
- Buzzer sounds once when keeping the switch operation for three seconds with each seat in lock* status.
- After the completion of all items for initialization process, the buzzer sounds three times when finishing the final operation and turning the switch from ON to OFF.

1) Move the seat backward using slide switch, and keep the seat lock* status for three seconds or more.

2) Move the seat downward using tilt switch, and keep the seat lock* status for three seconds or more.

3) Move the seat downward using lifter switch, and keep the seat lock* status for three seconds or more.

4) Tilt the seat backrest forward using reclining switch, and keep the seat lock* status for three seconds or more.

*: Seat lock is the status that the switch is being operated although the seat has reached the movable terminal point, and that there is no pulse output from the encoder within the specified period of time.

NOTE:

When the following conditions are met, the initializing operation is cancelled even though the procedure is carried out halfway.

- Any operation interval between each initialization procedures from 1) to 4) exceeded 10 seconds.
- All operations throughout initialization procedure 1) to 4) was not performed.
- During initialization procedure, power supply was cut off, or the voltage to the memory module exceeded the range of operating voltage.

SECURITY AND LOCKS

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	Page
1. General Description	2
2. Door Lock Control System	8
3. Keyless Entry System	13
4. Security System	26
5. Front Inner Remote	33
6. Front Outer Handle	34
7. Front Door Latch and Door Lock Actuator Assembly	35
8. Front Door Lock Actuator	36
9. Rear Inner Remote	37
10. Rear Outer Handle	38
11. Rear Door Latch and Door Lock Actuator Assembly	39
12. Rear Door Lock Actuator	40
13. Rear Gate Release Switch	41
14. Rear Gate Latch Assembly	42
15. Front Hood Lock Assembly	43
16. Remote Openers	44
17. Ignition Key Lock	45
18. Key Lock Cylinders	46
19. Security Control Module	47
20. Impact Sensor	48
21. Keyless Entry Control Module	50
22. Keyless Buzzer	51
23. Body Integrated Unit	52
24. Transmitter	53
25. Immobilizer Control Module	55
26. Immobilizer Antenna	56